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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/657,262

Applicant(s)

MAEI ET AL.

Examiner

WILLIAM C. STOREY

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

2. A series of singular dependent claims is permissible in which a dependent claim refers to a preceding claim which, in turn, refers to another preceding claim.

A claim which depends from a dependent claim should not be separated by any claim which does not also depend from said dependent claim. It should be kept in mind that a dependent claim may refer to any preceding independent claim. In general, applicant's sequence will not be changed. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 3 (and dependents) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains material which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the invention was filed. A patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is

based, and to demonstrate that the patentee was in possession of the invention that is claimed to put the public in possession of what the applicant claims as the invention. Further, the written description requirement promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention for the duration of the patent's term. Claim 3 claims limitations that are incongruent with claim 1, from which it is dependent. Claim 1 discloses two separate protocol units as 1, whereas claim 3 claims that those two separate protocol units now replace by a single protocol unit that is to replace the two previous ones. The examiner assumes that claim 3 is drawn to fig. 4, and claim 1 towards fig. 1. It is clear from the claim language and reference to the mentioned figures that the inherited limitations of claim 1 and the continuing limitations of claim 3 do not have a written description that provides all the limitations of the two claims in mutual existence. Please provide written description support for the contentious limitations occurring in the same embodiment at the same time considering the limitations of claim 1 and claim 3 in totality.

5. Claim 3 (and dependents) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains material which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the invention was filed. A patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is

based, and to demonstrate that the patentee was in possession of the invention that is claimed to put the public in possession of what the applicant claims as the invention. Further, the written description requirement promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention for the duration of the patent's term. Claim 3 claims a switching unit that switches a connection of the shared protocol unit (which supposedly is a stand-in for both the first and second T30 protocol control units) with the facsimile modem or with the T38 protocol unit. Please provide written description support for the limitations of claim 1 existing in the same embodiment with the claimed switching unit.

6. Claim 3 (and dependents) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains material which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the invention was filed. A patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed to put the public in possession of what the applicant claims as the invention. Further, the written description requirement promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention

for the duration of the patent's term. Claim 3 claims a switching unit that switches a connection of the shared protocol unit (which supposedly is a stand-in for both the first and second T30 protocol control units) with the facsimile modem or with the T38 protocol unit. Claim 1 claimed that the first T30 protocol unit is directly connected with the facsimile modem. However, claim 3 which depends on this limitation from claim 1 now claims that the first T30 protocol unit no longer exists. Please provide written description support for the limitations of claim 1 existing in the same embodiment with the claimed switching unit. This includes providing written support for not having a first T30 protocol control unit, but still having a first T30 protocol control unit directly connected to the facsimile modem.

7. Claim 3 (and dependents) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains material which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the invention was filed. A patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed to put the public in possession of what the applicant claims as the invention. Further, the written description requirement promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention

for the duration of the patent's term. Claim 3 claims a switching unit that switches a connection of the shared protocol unit (which supposedly is a stand-in for both the first and second T30 protocol control units) with the facsimile modem or with the T38 protocol unit. Claim 1 claimed that the first T30 protocol unit is directly connected with the facsimile modem. However, claim 3 which depends on this limitation from claim 1 now claims that the first T30 protocol unit no longer exists. Even considering the shared protocol control unit as a stand-in for the first T30 protocol unit en arguendo, when the switching unit switches the connection of the shared protocol control unit to the T38 protocol unit, the shared protocol control unit would most definitely not be considered as being directly connected with the facsimile modem (It was specifically claimed that the facsimile modem **or** the T38 protocol control unit would have a connection). Please provide written description support for the limitations of claim 1 existing in the same embodiment with the claimed switching unit. Other issues are similarly produced with regard to the second T30 protocol control unit.

8. Claim 3 (and dependents) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Considering the written description errors above, please provide enabling support for the incongruencies. (For example, provide an enabling disclosure of how a connection may be switched away from a facsimile unit and a T30 protocol unit, but still have a direct connection between the first T30 protocol unit and the facsimile modem.)

9. Claim 8 (and dependents) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains material which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the invention was filed. A patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed to put the public in possession of what the applicant claims as the invention. Further, the written description requirement promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention for the duration of the patent's term. Claim 7 claims multiple modems. However, claim 8 now says that there is only one modem. Please provide written description support for these two mutually exclusive and incongruent limitations in the same embodiment. Further, it was claimed in claim 7 that the facsimile modem is directly connected to the voice encoding/decoding unit. Please provide support for the voice encoding/decoding unit directly connected to the facsimile modem when the connection between the two is switched to connect the facsimile modem with the network control unit.
10. Claim 8 (and dependents) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in

the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Please provide enabling support for the discussed issues provided for the written description rejection for claim 8 above.

11. Claims 11 & 12 (and dependents) are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains material which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the invention was filed. A patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed to put the public in possession of what the applicant claims as the invention. Further, the written description requirement promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention for the duration of the patent's term. Please provide written description support in the same embodiment for a shared communication image processing unit and the limitations inherited from claim 3 & 1 (for example, communication unit selecting unit that selects either of a first communication unit or a second communication when all of the items of the two communication units no longer exist or are no longer separate or separately selectable.)

12. Claims 11 & 12 (and dependents) are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Please provide enabling support for the discussed issues provided for the written description rejection for claims 11 & 12 above.

13. Claims 12 (and dependents) are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains material which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s) had possession of the claimed invention at the time the invention was filed. A patent must describe the technology that is sought to be patented; the requirement serves both to satisfy the inventor's obligation to disclose the technologic knowledge upon which the patent is based, and to demonstrate that the patentee was in possession of the invention that is claimed to put the public in possession of what the applicant claims as the invention. Further, the written description requirement promotes the progress of the useful arts by ensuring that patentees adequately describe their inventions in their patent specifications in exchange for the right to exclude others from practicing the invention for the duration of the patent's term. Please provide written description support in the same embodiment for a shared protocol control unit and the limitations inherited from claim 7 & 8 (for example, communication unit selecting unit that selects either of a first

communication unit or a second communication when all of the items of the two communication units no longer exist or are no longer separate or separately selectable.)

14. Claim 12 (and dependents) is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Please provide enabling support for the discussed issues provided for the written description rejection for claim 12 above.

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 1, 7, & 10 (and dependents) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims were amended to recite "directly," as if it would be an amendment around the prior art application of record. However, "directly" is indefinite. It is unclear as to what directly connected is supposed to limit or include. For example, the applicant specifically references fig. 1 in his or her remarks on pg. 9, 1st ¶, as providing support for the limitation of "directly." However, the connection between the claimed "directly connected" units is provided by a double-arrow, which only implies further ambiguity. The use of a double-arrow usually encompasses a range, or is used as a circumscribed placeholder for an extended range. The double-arrow may further mean two-way connection between units. Nonetheless, there is a distance between the units, which are connected by this

amorphous double-arrow. Even if the double-arrow were to represent a wire, for example, it may still be said that the units are indirectly connected through a wire.

17. Claim 3 (and dependents) is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 claims a switching unit that switches a connection of the shared protocol unit (which supposedly is a stand-in for both the first and second T30 protocol control units) with the facsimile modem or with the T38 protocol unit. Claim 1 claimed that the first T30 protocol unit is directly connected with the facsimile modem. However, claim 3 which depends on this limitation from claim 1 now claims that the first T30 protocol unit no longer exists. Even considering the shared protocol control unit as a stand-in for the first T30 protocol unit *en arguendo*, when the switching unit switches the connection of the shared protocol control unit to the T38 protocol unit, the shared protocol control unit would most definitely not be considered as being directly connected with the facsimile modem (It was specifically claimed that the facsimile modem **or** the T38 protocol control unit would have a connection). This renders the claim unclear. It is unclear how to interpret a first T30 protocol control unit that no longer exists as being directly connected to a facsimile modem when a shared protocol unit that may act as a stand-in has the connection to a facsimile modem switched to a connection with a T38 protocol control unit. Other confusion is similarly produced with regard to the second T30 protocol control unit.

18. Claim 8 (and dependents) is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

which applicant regards as the invention. Claim 7 claims multiple modems. However, claim 8 now says that there is only one modem. Further, it was claimed in claim 7 that the facsimile modem is directly connected to the voice encoding/decoding unit. This renders the claim unclear. It is unclear how to interpret a facsimile modem that no longer exists as being directly connected to a voice encoding/decoding unit when a shared facsimile modem that may act as a stand-in has the connection to a voice encoding/decoding unit switched to a connection with a network control unit.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahan et al (US Patent Publication 2004/0196833), hereinafter referred to as Dahan; in view of Welin (US Patent Application Publication No. 2002/0031086), Oobayashi (US Patent Publication 2002/0075521), Murata et al (Japanese Patent Application Laid-Open No. 2002-044363), hereinafter referred to as Murata; and Iizuka (US Patent 688796).

Regarding claim 1, Dahan and others disclose a facsimile apparatus comprising: a network interface that connects to an IP network via a LAN or a public line; a TCP/UDP/IP protocol control unit that is connected to the network interface and controls an IP protocol and a TCP/UDP protocol; a real-time transfer protocol control

unit that is connected to the TCP/UDP/IP protocol control unit and controls a real-time transfer protocol; a voice encoding/decoding unit that is connected to the real-time transfer protocol control unit and encodes and decodes a voice signal; a facsimile modem that is connected to the voice encoding/decoding unit and modulates and demodulates a facsimile signal; a first T30 protocol control unit that is connected to the facsimile modem and controls a T30 facsimile protocol; a first communication image processing unit that is connected to the first T30 protocol control unit and conducts image processing of communication image data; and an image storage unit that is connected to the communication image processing unit and stores a read image or image data received from a network. In addition, Dahan discloses a distributed gateway for combined communication services.

Here more detail is presented to discuss the above teachings: Dahan discloses that signals from a conversion path 600 can be transported on a packet-based network, such as the Internet 122 or a VoIP network 126, as disclosed in paragraph 147. It is inherent that there must be some form of network interface connection via a LAN or public line in order to connect to an IP network, such as an Internet or VoIP connection, for the express purpose of connecting to said network connections. This reads on claimed network interface that connects to the IP network via a LAN or a public line. Figure 6 depicts an RTP unit 334 connected to a UDP/IP unit 336, which reads on claimed real-time transfer protocol control unit that controls a real-time transfer protocol, and is further disclosed in paragraph 147. Dahan discloses an encoder 220 and a decoder 218 connected to the RTP unit that reads on claimed voice encoding/decoding

unit that is connected to the real-time transfer protocol control unit and encodes and decodes a voice signal, as disclosed in Figure 6 and paragraph 147. Dahan discloses a data pump (DP) 333 (facsimile modem) that modulates the fax signals into voice signals and is connected to the encoder 220 and decoder 218, which reads on facsimile modem that is directly connected to the voice encoding/decoding unit and modulates and demodulates a facsimile signal, as disclosed in Figure 6 and paragraph 147. Dahan also discloses a fax machine 107 connected to a network and modem, as disclosed in Figure 2. It is notoriously well known that a fax machine should contain a modem for modulation and demodulation of a signal. It is also notoriously well known in the art to conform to T30 protocol in fax transmissions for the purpose of being able to communicate with the majority of popular faxes. Therefore, the disclosure of a fax machine 107 reads on claimed T30 protocol control unit that is connected to the facsimile modem and controls a T30 facsimile protocol. Further, it is inherent for a fax machine to contain an image scanning and processing unit. Therefore, fax machine 107 would read on a first communication image processing unit that is connected to the first T30 protocol unit and conducts image processing of communication image data, as disclosed in Figure 2. Nonetheless, a better interpretation of a first T30 protocol control unit that is directly connected to the facsimile modem and controls a T30 facsimile protocol may be provided. The typical conventional facsimile apparatus operates in convention with the T30 protocol. In order for the system to communicate with the typical conventional facsimile apparatus, inherently, a first T30 protocol control unit must be provided. For example, a data pump (facsimile modem) for communicating would

need a T30 protocol control unit to communicate with the most typical fax machine. It would have been at least obvious to provide a T30 protocol control unit in order to allow the system to have greater utility and/or flexibility in communicating with the majority and most common facsimile unit types. The applicant has claimed a particular layout of the T30 protocol unit directly connected to the facsimile modem. If such a layout were inherently required for communication according to the T30 standard, then the layout would inherently be provided for. If this were not the case, it would have been obvious to provide such a particular layout based upon mere design choice, being obvious to try based on a limited number of placement options, and/or predictable results. Thus, the first T30 protocol unit directly connected to the facsimile modem that is directly connected to voice encoding/decoding unit may be provided for in order to communicate with the conventional fax machine in a useful manner according to the communication protocol.

Dahan discloses TCP/IP header control unit 339 and a udp/ip header control unit 336, as disclosed in figure 3. In addition, Dahan discloses that instead of sending faxes with a TCP header, a UDP header may be used, as disclosed in paragraph 107. However, Dahan fails to disclose the TCP, UDP, and IP control units contained together. However, the examiner maintains that it was well known in the art to provide the TCP, UDP, and IP control units contained together, as taught by Welin.

In a similar field of endeavor, Welin discloses a tcp/udp/ip protocol control unit that is connected to the network interface and controls an IP protocol and a TCP/UDP protocol. In addition, Welin discloses systems, processes, and integrated circuits for

improved packet scheduling of media over packet. Further, Welin discloses a control unit 381 connected to a network physical interface 391, which is connected to a packet data network 351, which reads on "control unit that is connected to the network interface, as disclosed in Figure 3. In addition, Welin discloses a tcp/udp/ip stack in 611 and 3733, which may be placed inside the control unit such as 381 to control header output, which reads on claimed tcp/udp/ip protocol control unit, as disclosed in figures 3 and 6.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dahan by specifically providing TCP, UDP, and IP control units contained together, as taught by Welin, for the purpose of conserving space.

Dahan discloses a fax machine 107, with components inherent to a conventional fax machine. However, Dahan fails to distinctly disclose an image storage unit. However, the examiner maintains that it was well known in the art to provide an image storage unit, as taught by Oobayashi.

In a similar field of endeavor, Oobayashi discloses an image storage unit that is connected to the communication image processing unit and stores a read image or image data received from a network. In addition, Oobayashi discloses an Internet facsimile and control method thereof. Further, Oobayashi discloses an image storage section 107, which reads on claimed image storage unit; connected to an image processing system 106, which reads on claimed connected to the communication image processing unit; connected to a read section 104, which reads on claimed read image;

and all sections are connected through a bus connection 114, which reads on claimed network, as disclosed in Figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dahan by specifically providing an image storage unit, as taught by Oobayashi, for the purpose of converting read image data into a format suitable for transmission, as disclosed in paragraph 39.

The discussion thus far provides for claimed a conventional facsimile apparatus and first communication unit comprising the TCP/UDP/IP protocol control unit, the real-time transfer protocol control unit, the voice encoding/decoding unit, the facsimile modem, the first T30 protocol control unit and the communication image processing unit. However, the previous disclosures did not disclose a T.30 and T.38 protocol unit connected together. However, the examiner maintains that it was well known in the art to provide a T.30 and T.38 protocol unit connected together, as taught by Iizuka.

In a similar field of endeavor, Iizuka discloses a communication connecting device adaptive to an IP network and communication rate control method therefor. In addition, Iizuka discloses a sending apparatus that has communication by T.30 recommendations and communication by T.38 recommendations in the same apparatus, as disclosed in column 1 lines 15-29 and 49-65. It is inherent that a facsimile apparatus (sending apparatus) must have a T.30 and a T.38 control unit in order to communicate in ensured conformity with both of those standards. It is inherent that there be some sort of controller to conduct communications over the IP network and as has been mentioned previously, it would have been obvious to one of ordinary

skill in the art at the time the invention was made to provide connection to a TCP/UDP/IP control unit for the purpose of providing more flexibility in terms of compatibility, simplicity, and speed. It is also inherent that a facsimile apparatus would have an image processing unit to process scanned documents for sending, which reads on claimed second communication image processing unit that is connected between the second T30 protocol control unit and conducts image processing of communication image data. The discussion provided may read upon claimed second control unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing a T.30 and T.38 protocol unit connected together, as taught by Iizuka, for the purpose of communicating with different receiving ends.

In addition, the previous disclosures did not disclose a communication unit selecting unit. However, the examiner maintains that it was well known in the art to provide a communication unit selecting unit as disclosed by Murata.

In addition, Murata discloses facsimile equipment, facsimile transmission method and storage medium. Further, Murata discloses a means for selecting one of two different facsimile modes, as disclosed in paragraph 14. This reads on a communication unit selecting unit that selects either of a first communication unit or a second communication unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing a means for selecting one of two different facsimile modes, as taught by Murata, for the

purpose of providing more efficient synchronization between the transmitting and receiving sides of a fax communication and to secure a predetermined transmission speed depending on the situation of a data communication network allowing for more flexibility, as disclosed in paragraph 11.

lizuka disclosed a sending apparatus, which reads on claimed facsimile apparatus for T.38 and second communication unit, as disclosed in column 1, line 50 and discussed previously.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

Regarding claim 10, as the applicant has claimed that the claim has been amended to incorporate similar limitations now found in claim 1, everything as applied above for claim 1 except for the additions of first and second facsimile protocol control units and over a VoIP gateway. In addition, it is notoriously well known in the art to

conform to T30 protocol in fax transmissions for the purpose of communicating with the majority of fax machines. The protocol control units may correspond to the T30 protocol control units described for claim 1. Further, Dahan discloses transmittal of a fax call established with a remote VoIP gateway, which reads on claimed VoIP gateway, as a VoIP call over a VoIP network, as disclosed in paragraph 146 and 147.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

21. Claims 3 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the previous disclosures as applied to claim 1 above, and further in view of Ogawa (5042028).

Regarding claim 3, the claim inherits everything as applied above for claim 1. However, the previous disclosures did not disclose wherein the first T30 protocol control unit and the second T30 protocol control unit are configured by a shared protocol unit.

However, the examiner maintains that it was well known in the art to provide wherein the first T30 protocol control unit and the second T30 protocol control unit are configured by a shared protocol unit, as taught by Ogawa.

In a similar field of endeavor, Ogawa discloses two fax protocol control units controlled by a shared protocol control unit. In addition, Ogawa discloses a communication terminal device. Further, Ogawa discloses a fax communication control unit 40, which serves both G3 and G4 communication, as disclosed in Figure 1. Ogawa discloses the fax communication control unit serving both a G3 communication mode (T30) and a G4 communication mode: simultaneous facsimile communication in the G4 mode/G3 mode is possible by such operation of the communication terminal device of the particular embodiment, as disclosed at column 9, lines 58-61. It is well known in the art to reproduce a duplicate of something already widely known, such as a T30 control unit. Therefore, the examiner states that it was well known in the art at the time of the invention to produce two T30 control units and place them in a shared control unit instead of two different control units, for the purpose of connecting to two separate G3 fax machines and/or for the simplification of layout and configuration.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing the T30 protocol control unit and the public line facsimile protocol control unit are configured by a shared protocol unit, as taught by Ogawa, for the purpose of greatly improving communication efficiency, as disclosed at column 2, lines 33-34.

In addition, the previous disclosures failed to disclose a switching unit provided to selectively switch a connection of the shared protocol control unit with the facsimile modem or with the T.38 protocol control unit. However, the examiner maintains that it was well known in the art to selectively switch a connection of the shared protocol control unit with the facsimile modem or with the T.38 protocol control unit, as taught by Oobayashi.

In a similar field of endeavor, Oobayashi discloses an internet facsimile and control method thereof. In addition, Oobayashi discloses a network control section 110, which reads on claimed switching unit; that controls switching at least two different communication output modes, which reads on claimed selectively switch a connection, as disclosed in Figure 2 and paragraph 39. It is well known in the art to use a t.38 protocol control unit to ensure capability to communicate a fax over an IP standardized Ethernet connection, which reads on claimed T38 protocol control unit. In addition, Oobayashi discloses a branch from the network control section going to a modem 112, which reads on claimed modem, for a different type of communication than the other route previously-mentioned, as disclosed in Figure 2 and paragraph 37.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing a switching unit provided to selectively switch a connection of the shared protocol control unit with the facsimile modem or with the T.38 protocol control unit, as taught by Oobayashi, for the purpose of allowing selective, separate outputs that would both

conform to carry in a similar trait or traits and improve operability, as disclosed at paragraph 9 and paragraph 39.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

Regarding claim 11, the claim inherits everything as applied for claim 3. However, the previous disclosures did not disclose wherein the first communication image processing unit and the second communication image processing unit are configured by a shared communication image processing unit. However, the examiner maintains that it was well known in the art to provide wherein the first communication image processing unit and the second communication image processing unit are configured by a shared communication image processing unit, as taught by Oobayashi.

In a similar field of endeavor, Oobayashi discloses an image processing section 106 that serves two output paths connecting from communication control section 109 and network control section 110, as disclosed in Figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing wherein the first communication image processing unit and the second communication image processing unit are configured by a shared communication image processing unit, as taught by Oobayashi, for the purpose of conserving space, as is well known in the art.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

22. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the previous disclosures as applied to claim 1 above, and further in view of Walker et al. (US Patent Publication 2003/0193696), hereinafter referred to as Walker.

Regarding claim 4, the claim inherits everything as applied above for claim 1. However, the previous disclosures did not distinctly disclose to disclose a selective call control unit that first selects the first communication unit and calls a destination terminal to judge whether the destination terminal has T.38 mode communication capability, and when the destination terminal has the T.38 mode communication capability, temporarily suspends the session and selects the second communication unit to call the destination terminal. However, the examiner maintains that it was well known in the art to provide a selective call control unit that first selects the first communication unit and calls a destination terminal to judge whether the destination terminal has T.38 mode communication capability, and when the destination terminal has the T.38 mode communication capability, temporarily suspends the session and selects the second communication unit to call the destination terminal, as taught by Walker.

In a similar field of endeavor, Walker discloses voice and fax over IP call establishment in a communication network. In addition, Walker discloses the initialization of communication, which reads on claimed call a destination terminal; using voice communication, which reads on claimed first communication unit; by a media gateway, which reads on claimed selective call control unit; detects whether or not fax or t.38 communication is occurring, which reads on claimed judge whether the destination terminal has t.38 mode communication capability; and when it detects

positively, enables the image/t38 connection; which reads on claimed selects the second communication unit to call the destination terminal; and mutes the voice communication until it detects a necessity to switch back to voice communication, which reads on claimed temporarily suspends the session; as disclosed at paragraphs 49, 51, and 52.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing a selective call control unit that first selects the first communication unit and calls a destination terminal to judge whether the destination terminal has T.38 mode communication capability, and when the destination terminal has the T.38 mode communication capability, temporarily suspends the session and selects the second communication unit to call the destination terminal, as taught by Walker, for the purpose of improving efficiency and preventing the loss of a call, as disclosed at paragraph 4.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard

Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

Regarding claim 5, the same reasoning as applied for claim 4 rejects claim 5.

Regarding claim 6, the claim inherits everything as applied above for claim 4. However, the previous disclosures did not disclose wherein it is judged whether the destination terminal has the t.38 mode communication capability in a stage shifted to a facsimile protocol after the establishment of a session according to the call by the communication unit. However, the examiner maintains that it was well known in the art to provide wherein it is judged whether the destination terminal has the t.38 mode communication capability in a stage shifted to a facsimile protocol after the establishment of a session according to the first call by the communication unit, as taught by Walker.

In addition, Walker discloses switching to t.38 mode communication, which reads on claimed stage shifted to a facsimile protocol; after starting out the connection in the voice communication mode, which reads on claimed after the establishment of a session according to the call by the first communication unit. While in the t.38 communication mode, it is continuously checked whether or not the t.38 mode is still to be enabled, which reads on claimed judged whether the destination terminal has the t.38 mode communication capability, as disclosed at paragraph 49.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosure by specifically providing wherein it is judged whether the destination terminal has the t.38 mode communication

capability in a stage shifted to a facsimile protocol after the establishment of a session according to the call by the communication unit, as taught by Walker, for the purpose of improving efficiency and preventing the loss of a call, as disclosed at paragraph 4.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In *re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

23. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dahan in view of Welin, Oobayashi, and Murata et al (Japanese Patent Application Laid-Open No. 2002-044363), hereinafter referred to as Murata.

Regarding claim 7, Dahan discloses that signals from a conversion path 600 can be transported on a packet-based network, such as the Internet 122 or a VoIP network 126, as disclosed in paragraph 147. It is inherent that there must be some form of network interface connection via a LAN or public line in order to connect to an IP network, such as an Internet or VoIP connection, for the express purpose of connecting

to said network connections. This reads on claimed network interface that connects to the IP network via a LAN or a public line. Figure 6 depicts an RTP unit 334 connected to a UDP/IP unit 336, which reads on claimed real-time transfer protocol control unit that controls a real-time transfer protocol, and is further disclosed in paragraph 147. Dahan discloses an encoder 220 and a decoder 218 connected to the RTP unit that reads on claimed voice encoding/decoding unit that is connected to the real-time transfer protocol control unit and encodes and decodes a voice signal, as disclosed in Figure 6 and paragraph 147. Dahan discloses a data pump (DP) 333 that modulates the fax signals into voice signals and is connected to the encoder 220 and decoder 218, which reads on facsimile modem that is directly connected to the voice encoding/decoding unit and modulates and demodulates a facsimile signal, as disclosed in Figure 6 and paragraph 147. Dahan also discloses a fax machine 107 connected to a network and modem, as disclosed in Figure 2. It is notoriously well known that a fax machine should contain a modem for modulation and demodulation of a signal. It is also notoriously well known in the art to conform to T30 protocol in fax transmissions for the purpose of being able to communicate with the majority of popular faxes. Therefore, the disclosure of a fax machine 107 reads on claimed T30 protocol control unit that is connected to the facsimile modem and controls a T30 facsimile protocol. Further, it is inherent for a fax machine to contain an image scanning and processing unit. Therefore, fax machine 107 would read on a first communication image processing unit that is connected to the first T30 protocol unit and conducts image processing of communication image data, as disclosed in Figure 2. Nonetheless, a better interpretation of a first T30 protocol control

unit that is directly connected to the facsimile modem and controls a T30 facsimile protocol may be provided. The typical conventional facsimile apparatus operates in convention with the T30 protocol. In order for the system to communicate with the typical conventional facsimile apparatus, inherently, a first T30 protocol control unit must be provided. For example, a data pump (facsimile modem) for communicating would need a T30 protocol control unit to communicate with the most typical fax machine. It would have been at least obvious to provide a T30 protocol control unit in order to allow the system to have greater utility and/or flexibility in communicating with the majority and most common facsimile unit types. The applicant has claimed a particular layout of the T30 protocol unit directly connected to the facsimile modem. If such a layout were inherently required for communication according to the T30 standard, then the layout would inherently be provided for. If this were not the case, it would have been obvious to provide such a particular layout based upon mere design choice, being obvious to try based on a limited number of placement options, and/or predictable results. Thus, the first T30 protocol unit directly connected to the facsimile modem that is directly connected to voice encoding/decoding unit may be provided for in order to communicate with the conventional fax machine in a useful manner according to the communication protocol.

Dahan discloses TCP/IP header control unit 339 and a udp/ip header control unit 336, as disclosed in figure 3. In addition, Dahan discloses that instead of sending faxes with a TCP header, a UDP header may be used, as disclosed in paragraph 107.

However, Dahan fails to disclose the TCP, UDP, and IP control units contained together. However, the examiner maintains that it was well known in the art to provide the TCP, UDP, and IP control units contained together, as taught by Welin.

In a similar field of endeavor, Welin discloses a tcp/udp/ip protocol control unit that is connected to the network interface and controls an IP protocol and a TCP/UDP protocol. In addition, Welin discloses systems, processes, and integrated circuits for improved packet scheduling of media over packet. Further, Welin discloses a control unit 381 connected to a network physical interface 391, which is connected to a packet data network 351, which reads on "control unit that is connected to the network interface, as disclosed in Figure 3. In addition, Welin discloses a tcp/udp/ip stack in 611 and 3733, which may be placed inside the control unit such as 381 to control header output, which reads on claimed tcp/udp/ip protocol control unit, as disclosed in figures 3 and 6.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dahan by specifically providing TCP, UDP, and IP control units contained together, as taught by Welin, for the purpose of conserving space.

Dahan discloses a fax machine 107, with components inherent to a conventional fax machine. However, Dahan fails to distinctly disclose an image storage unit. However, the examiner maintains that it was well known in the art to provide an image storage unit, as taught by Oobayashi.

In a similar field of endeavor, Oobayashi discloses an image storage unit that is connected to the communication image processing unit and stores a read image or image data received from a network. In addition, Oobayashi discloses an Internet facsimile and control method thereof. Further, Oobayashi discloses an image storage section 107, which reads on claimed image storage unit; connected to an image processing system 106, which reads on claimed connected to the communication image processing unit; connected to a read section 104, which reads on claimed read image; and all sections are connected through a bus connection 114, which reads on claimed network, as disclosed in Figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Dahan by specifically providing an image storage unit, as taught by Oobayashi, for the purpose of converting read image data into a format suitable for transmission, as disclosed in paragraph 39.

However, the previous disclosures did not distinctly and satisfactorily disclose dealing with a public line as discussed in the claim.

In addition, Oobayashi discloses a net control section 111, which reads on claimed a network control unit that controls a connection to a public line, as disclosed in Figure 2 and paragraph 37. Oobayashi discloses a modem 112, which reads on claimed public line facsimile modem that is connected to the network control unit and modulates and demodulates a facsimile signal, as disclosed in Figure 2 and paragraph 37. Oobayashi discloses a system for communicating with group three facsimile machines, as disclosed in Figure 1. In order to effectively communicate with group 3

facsimile machines, it is inherent that a fax system would contain a T30 control section in order to conform to ITU-T standards for communication with a group 3 machine. Communication control section 109 controls fax communications over a telephone network that connects with group 3 facsimile machines, as disclosed in paragraph 37, Figure 2, and Figure 1. Therefore, the inherency of such communication and the control of communication control section 109 read on claimed a public line facsimile protocol control unit that is connected to the public line facsimile modem and controls the T.30 facsimile protocol, as disclosed in Figure 1, Figure 2, and paragraph 37. Oobayashi discloses an image processing section 106 and an image storage section 107, which reads on claimed public line communication image processing unit that is connected between the public line facsimile protocol control unit and the image storage unit and conducts image processing of communication image data, as disclosed in Figure 2 and paragraph 37.

Therefore, it would have been obvious to include the said teachings of Oobayashi for the purpose of providing greater fax communication and control.

The discussions thus far read on claimed first communication unit, facsimile apparatus connected to the IP network, and first communication unit comprising the TCP/UDP/IP protocol control unit, the real-time transfer protocol control unit, the voice encoding/decoding unit, facsimile modem, the T30 protocol unit and the communication image processing unit. All of the disclosures with respect to claim 7 thus far read on claimed second communication unit comprising the network control unit, the public line facsimile modem, the public line facsimile protocol control unit and the public line

communication image processing unit, facsimile apparatus connected to the public line, and second communication unit. However, the previous disclosures have not distinctly and satisfactorily disclosed a means for selecting one of two different facsimile modes. In addition, Murata and Maei disclose a technology which has a configuration for connecting to the Internet via a public line network (PSTN: Public Switched Telephone Network) and a LAN control section containing a T.38/T.37 mode independent of the PSTN, and when the ability of the other end is known, conducts communications in the T.37 mode, and when it is not known, conducts communications in the T.38 mode, as disclosed in Murata paragraph 14 and Maei paragraph 14. The examiner maintains that it was well known in the art at the time the invention was made to provide a means for selecting one of two different facsimile modes, as taught by Murata. In addition, Murata discloses a means for selecting one of two different facsimile modes, as disclosed in paragraph 14. This reads on a communication unit selecting unit that selects either of a first communication unit or a second communication unit.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing a means for selecting one of two different facsimile modes, as taught by Murata, for the purpose of providing more efficient synchronization between the transmitting and receiving sides of a fax communication and to secure a predetermined transmission speed depending on the situation of a data communication network, as disclosed in paragraph 11.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

Regarding claim 8, the claim inherits everything as applied above for claim 7. In addition, Dahan discloses wherein the facsimile modem and the public line facsimile modem are configured by a shared facsimile modem, and a switching unit is provided to selectively switch a connection of the shared facsimile modem with the voice encoding/decoding unit or with the network control unit. Further, Dahan discloses a single modem 110 which serves multiple input routes, which reads on claimed configured by a shared facsimile modem, as disclosed in Figure 1. The facsimile modem of the first communication unit reads on claimed facsimile modem, as disclosed in the rejection of claim 7. The public line facsimile modem of the second communication unit reads on claimed public line facsimile modem, as disclosed in the rejection of claim 7. In addition, Dahan discloses the gateway 108 and the modem 110

combined into a single unit 200 in Figure 2, as disclosed in paragraph 63. Further, Dahan discloses a controller 248, which switches the handling of a call from one input path to another, which reads on claimed switching unit provided to selectively switch a connection of the shared facsimile modem, as disclosed in Figure 2 and paragraph 134. The voice encoding/decoding unit of the first communication unit reads on claimed voice encoding/decoding unit, as disclosed in the rejection of claim 7. The network control unit of the second communication unit reads on claimed network control unit, as disclosed in the rejection of claim 7.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

24. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over the previous disclosures as applied to claim 7 above, and further in view of Tanaka (Japanese Publication 2003060836).

Regarding claim 9, the claim inherits everything as applied above for claim 7. In addition, the previous disclosures disclose the ability to select either of the first communication unit or the second communication as described in the rejection of claim 7, which reads on claimed selects the first communication unit to call the destination terminal and selects the second communication unit to call the destination. However, the previous disclosures did not distinctly disclose an IP network terminal identification number storage unit that stores identification numbers used to identify IP network terminals. However, the examiner maintains that it was well known in the art to provide an IP network terminal identification number storage unit that stores identification numbers used to identify IP network terminals, as taught by Tanaka.

In a similar field of endeavor, Tanaka discloses network facsimile equipment. In addition, Tanaka discloses an input means, which reads on claimed destination terminal number input unit; for inputting the telephone number, which reads on claimed destination terminal number; of a transmitting destination, which reads on claimed destination terminal; as disclosed in paragraph 8. In addition, Tanaka discloses a registration means, which reads on claimed IP network terminal identification number storage unit; a facsimile apparatus referenced by the inputted telephone number, which reads on claimed IP network terminals; and IP address information with respect to the inputted telephone number, which reads on claimed identification numbers. Tanaka discloses a communication link decision means and telephone number collating means, which read on selective call control unit, as disclosed in paragraph 10. Tanaka discloses a telephone number, which reads on claimed input number and destination

terminal number; IP address information, which reads on claimed identification numbers; registration means, which reads on claimed IP network terminal identification number storage unit; facsimile apparatus, which reads on claimed destination terminal, as disclosed in paragraph 10.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing an IP network terminal identification number storage unit that stores identification numbers used to identify IP network terminals, as taught by Tanaka, for the purpose of increasing efficiency and speed by not having to determine the IP address of an inputted telephone number every time the telephone number is inputted, as disclosed in paragraph 4.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

25. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the previous disclosures as applied above for claim 8 and further in view of Ogawa (US Patent 5042028).

Regarding claim 12, the previous disclosures disclose everything as applied above for claim 8. However, the previous disclosures did not disclose wherein the first communication image processing unit and the public line communication image processing unit are configured by a shared communication image processing unit. However, the examiner maintains that it was well known in the art to provide wherein the first communication image processing unit and the public line communication image processing unit are configured by a shared communication image processing unit, as taught by Oobayashi.

In a similar field of endeavor, Oobayashi discloses an image processing section 106 that serves two output paths connecting from communication control section 109 and network control section 110, as disclosed in Figure 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing wherein the first communication image processing unit and the public line communication image processing unit are configured by a shared communication image processing unit, as taught by Oobayashi, for the purpose of conserving space, as is well known in the art.

In addition, the previous disclosures did not disclose wherein the T30 protocol control unit and the public line facsimile protocol control unit are configured by a shared

protocol unit. However, the examiner maintains that it was well known in the art to provide wherein the T30 protocol control unit and the public line facsimile protocol control unit are configured by a shared protocol unit, as taught by Ogawa.

In a similar field of endeavor, Ogawa discloses two fax protocol control units controlled by a shared protocol control unit. In addition, Ogawa discloses a communication terminal device. Further, Ogawa discloses a fax communication control unit 40, which serves both G3 and G4 communication, as disclosed in Figure 1. Ogawa discloses the fax communication control unit serving both a G3 communication mode (T30) and a G4 communication mode: simultaneous facsimile communication in the G4 mode/G3 mode is possible by such operation of the communication terminal device of the particular embodiment, as disclosed at column 9, lines 58-61. It is well known in the art to reproduce a duplicate of something already widely known, such as a T30 control unit. Therefore, the examiner states that it was well known in the art at the time of the invention to produce two T30 control units and place them in a shared control unit instead of two different control units, for the purpose of connecting to two separate G3 fax machines and for the simplification of layout and configuration.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previous disclosures by specifically providing the T30 protocol control unit and the public line facsimile protocol control unit are configured by a shared protocol unit, as taught by Ogawa, for the purpose of greatly improving communication efficiency, as disclosed at column 2, lines 33-34.

In addition, "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997) (The absence of a disclosure in a prior art reference relating to function did not defeat the Board's finding of anticipation of claimed apparatus because the limitations at issue were found to be inherent in the prior art reference); see also In re Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original)."-MPEP 2114-R1.

Response to Arguments

26. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Regarding the applicant's allegation that "Dahan does not disclose 'a facsimile modem that is directly connected to the voice encoding/decoding unit and modulates and demodulates a facsimile signal ... [and] a first T30 protocol control unit that is directly connected to the facsimile modem,' as recited in claim 1, and similarly recited in claims 7 and 10." First, the examiner refers the applicant to the above 112 rejection pertaining to the indefiniteness of usage the word "directly." Second, the previous rejection provided for "a facsimile modem that is directly connected to the voice encoding/decoding unit." At least "Dahan discloses a data pump (DP) 333 (facsimile

modem) that modulates the fax signals into voice signals and is connected to the encoder 220 and decoder 218, which reads on facsimile modem that is directly connected to the voice encoding/decoding unit and modulates and demodulates a facsimile signal, as disclosed in Figure 6 and paragraph 147." would provide for the limitation. Third, a new ground or interpretation for rejection has been provided for "a first T30 protocol control unit that is directly connected to the facsimile modem.": The typical conventional facsimile apparatus operates in convention with the T30 protocol. In order for the system to communicate with the typical conventional facsimile apparatus, inherently, a first T30 protocol control unit must be provided. For example, a data pump (facsimile modem) for communicating would need a T30 protocol control unit to communicate with the most typical fax machine. It would have been at least obvious to provide a T30 protocol control unit in order to allow the system to have greater utility and/or flexibility in communicating with the majority and most common facsimile unit types. The applicant has claimed a particular layout of the T30 protocol unit directly connected to the facsimile modem. If such a layout were inherently required for communication according to the T30 standard, then the layout would inherently be provided for. If this were not the case, it would have been obvious to provide such a particular layout based upon mere design choice, being obvious to try based on a limited number of placement options, and/or predictable results. Thus, the first T30 protocol unit directly connected to the facsimile modem that is directly connected to voice encoding/decoding unit may be provided for in order to communicate with the conventional fax machine in a useful manner according to the communication protocol.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM C. STOREY whose telephone number is (571)270-3576. The examiner can normally be reached on Monday - Friday Eastern Standard Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Y. Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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